

The Road Traveled to “No Elective Deliveries less than 39 Completed Weeks”

By Colette B. LaCombe, RNC



Women's
& Children's
HOSPITAL

A Campus of
THE REGIONAL MEDICAL CENTER OF ACADIANA

*I wish to thank Donna Frye, RN, MN,
Director, HCA Women's & Children's
Clinical Service for providing the
information on behalf of HCA.*

WHO ARE WE

OUR ORGANIZATION



Central Group



Mid America Division



Women's & Children's Hospital Lafayette, LA



Women's
& Children's
HOSPITAL

A Campus of
THE REGIONAL MEDICAL CENTER OF ACADIANA

Women's & Children's Hospital

Founded in 1983, Women's & Children's Hospital, A campus of The Regional Medical Center of Acadiana has been providing specialized health care services for women and children for more than 20 years.

Since our humble beginnings as a birthing hospital, we have grown to become one of Louisiana's leading health care institutions dedicated exclusively to the care of women and children.



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& Children's
HOSPITAL

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Women's & Children's Hospital

▶ Awards/Accreditation:

- TJC Lab Accreditation
- CLIA Accreditation
- NICU "Center of Excellence" designation from United Healthcare
- Voted "Best Place to have a Baby" Times of Acadiana

▶ Ambulatory Surgery Center – Lafayette Surgicare

▶ Critical Care

- NICU; NICU Transport
- PICU; PICU Transport
- Pediatric Emergency Room

▶ Diagnostic Imaging Services

▶ Patient Education and Support groups

▶ Emergency Services

▶ Laboratory

▶ Level III Neonatal Intensive Care Unit (Regional Referral Center)

▶ Pediatrics

▶ Pediatrics Specialty Clinic

▶ Pediatric Surgical Specialties

▶ Sleep Lab

▶ Surgery

▶ Women's Services *including*

- Dedicated High Risk Antenatal Unit
- Fertility
- Labor/Delivery/Recovery Suites
- OB Hospitalist
- Postpartum Unit

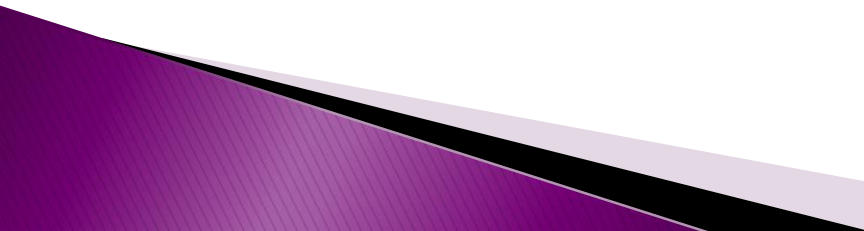


Women's
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LABOR & DELIVERY / HIGH RISK ANTENATAL UNIT

- ▶ Labor and Delivery Unit
 - 2010 yearly deliveries – 3245
 - 15 LDRs
 - 2 Bed OB Triage
 - 2 OB OR Suites
 - 2 Bed OB Recovery

 - ▶ High Risk Antenatal Unit
 - 10 Beds
 - Maternal Fetal Medicine Program
- 

HCA STORY

The annual 2006 HCA Perinatal Conference focused on care of the “near term premature infant”.

Discussions raised questions--


- Were there totally elective deliveries and cesarean sections? What was the frequency?
- Is iatrogenic prematurity a problem?
- Are there implications for the infants born at term, less than 39 week?
- Can we improve outcomes by minimizing elective deliveries prior to 39 weeks gestation?
- What evidence does the evidence say?

**Our Focus became the 37–39 week
elective induction.**



2007 STUDY

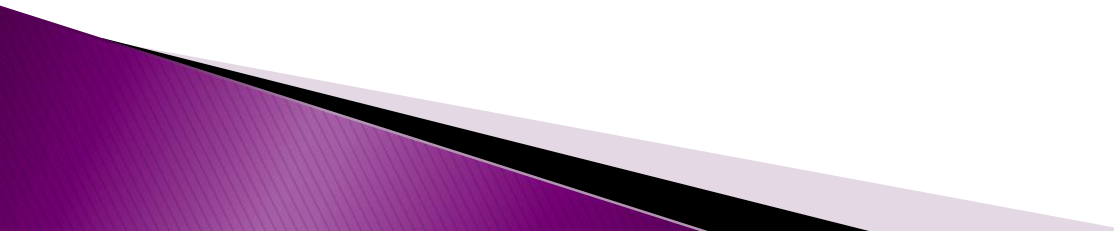
2007 STUDY OBJECTIVES

- ▶ To determine the frequency of elective term deliveries prior to 39 completed weeks in the United States population.
 - ▶ To examine neonatal outcomes associated with elective delivery at “term” but prior to 39 completed weeks of gestation in all forms of deliveries (inductions, primary and repeat cesarean sections).
 - ▶ To examine maternal consequences of elective term inductions.
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STUDY METHODOLOGY

- ▶ Hospital Corporation of America – 114 obstetric facilities in 21 states.
 - ▶ 225, 000 annual deliveries.
 - ▶ Has been shown to be representative of the U.S. population as a whole.
-
- Clark, S., Belfort, M., Dildy, G., Herbst, M., Meyers, J., & Hankins, G. (2008). Maternal death in the 21st century: Causes, prevention, and relationship to cesarean delivery. *American Journal of Obstetrics and Gynecology*. In Press.
 - Clark, S. L., Belfort, M. A., Hankins, G. D., Meyers, J. A., & Houser, F. M. (2007). Variation in the rates of operative delivery in the United States. *American Journal of Obstetrics and Gynecology*, 196(6), 526.e1–526.e5.

2007 STUDY METHODOLOGY

- ▶ **Population sampled: All deliveries between May 1, 2007 and July 31, 2007 in 27 HCA facilities.**
 - **Women's & Children's Hospital**
 - ▶ **Facilities were selected to be representative of the entire population—geographic characteristics and delivery volume –**
 - ▶ **Comprehensive data was collected for all women undergoing planned delivery at 37 weeks and 0 days or greater.**
- 

2007 STUDY RESULTS

- ▶ 17, 794 deliveries
- ▶ 14,955 at 37 weeks or greater
- ▶ 6562 were *planned term deliveries.*
- ▶ 4645 were *elective planned term deliveries.*
- ▶ *31% of all term deliveries were elective.*
- ▶ *11% of all term deliveries were elective and prior to 39 completed weeks gestation.*
 - **THIS IS WHERE WE CAN MAKE A DIFFERENCE.**

RESULTS

NICU Admissions Following *Elective* Deliveries

- ▶ 37.0 – 37.6 weeks: 17.8%
- ▶ 38.0 – 38.6 weeks: 8.2%
- ▶ ≥ 39 weeks: 4.6%

- ▶ All differences highly significant ($p < 0.001$)

- ▶ 2/3 were direct NICU admits, 1/3 were admitted later after initial normal newborn admission.
 - As a note, the delivery provider may not realize the baby went to the NICU after the initial admission.

- ▶ Mean NICU stay for these infants was 4.5 days.

2007 STUDY CONCLUSIONS

- ▶ 11% of all term deliveries are elective and performed prior to 39 weeks gestation, contrary to longstanding ACOG/AAP recommendations.
- ▶ Given the nature of many “indications”, the actual rate is probably higher.
- ▶ Such infants experience significant morbidity.
- ▶ For all Planned Inductions, the cesarean delivery rate is directly related to initial cervical dilatation.
- ▶ Elective Induction of labor with an unfavorable cervix also increases the risk of cesarean delivery.

DISSEMINATION OF THE FINDINGS

► Fall 2007

- Findings were shared with the Clinical Work Group
- Findings were shared at the Perinatal Conference
- Some Hospitals implemented policies

► Spring 2008

- Supported a National Quality Form Task Force to establish National Voluntary Consensus Standards for Perinatal Care

ADOPTION AND IMPLEMENTATION

Fall of 2008

Tool boxes including references, educational resources, and a prototype policy were provided to the hospitals

Dr. Clark conducted “Physician to Physician”
Conference calls

Monitoring of Perinatal Services to determine:

- Discussion

- Adoption of a position statement

- Endorsement of a policy

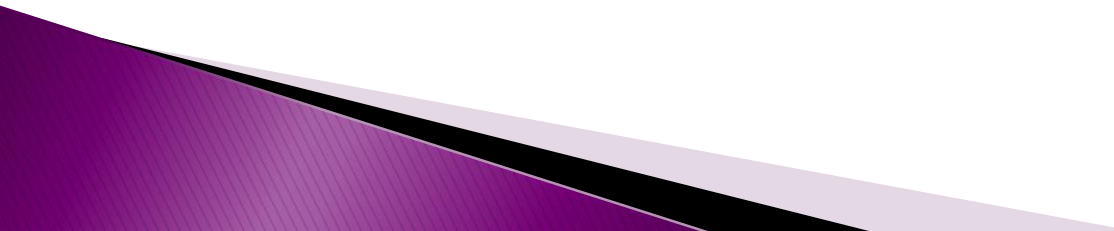
ADOPTION AND IMPLEMENTATION

Additional 2008 Strategies

Perinatal nursing leaders provided education to physician office staff.

Perinatal nursing leaders, childbirth educators, and staff nurses provided targeted patient *education—correcting misconceptions regarding the safety of early term births.*

Physician champions and Nursing leaders began to provide education to OB department s and advocate for a position statement or a policy regard “No Elective Deliveries Less than 39 weeks gestation.”



ELECTIVE DELIVERIES PRIOR TO 39 WEEKS

2009

The Joint Commission adopted as a core measure

Leapfrog has adopted as a quality measure

May

76 of the 111 hospitals or 68% have adopted a position statement or endorsed a policy

Replication of the study began

April Data collection for compliance began



2009 STUDY


OBJECTIVE AND STUDY DESIGN

Objective:

Examine the effectiveness of different approaches to a reduction in elective early term deliveries or the effect of such policies on newborn intensive care admissions and still birth rates.

Study Design:

We conducted a retrospective cohort study of prospectively collected data and examined outcomes in 27 hospitals before and after implementation of 1 of 3 strategies for the reduction of elective early term deliveries.



THREE APPROACHES TO PRACTICE CHANGE:

All hospitals began with similar rates of elective delivery at <39 weeks of gestation.

Group 1

Endorsed a formal policy enforced by hospital staff.

Group 2

Endorsed a formal policy that was not enforced by hospital staff, but with automatic peer review for exceptions.

Group 3

Relied on education only.

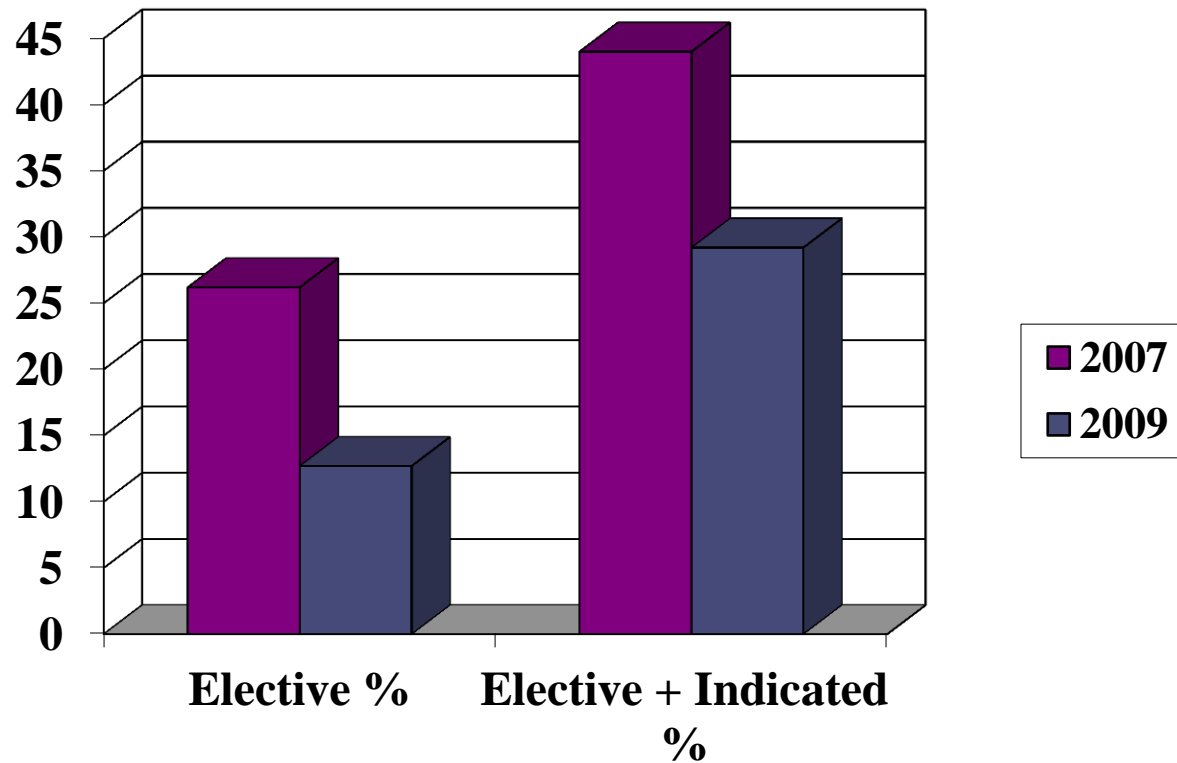


2009 STUDY RESULTS:

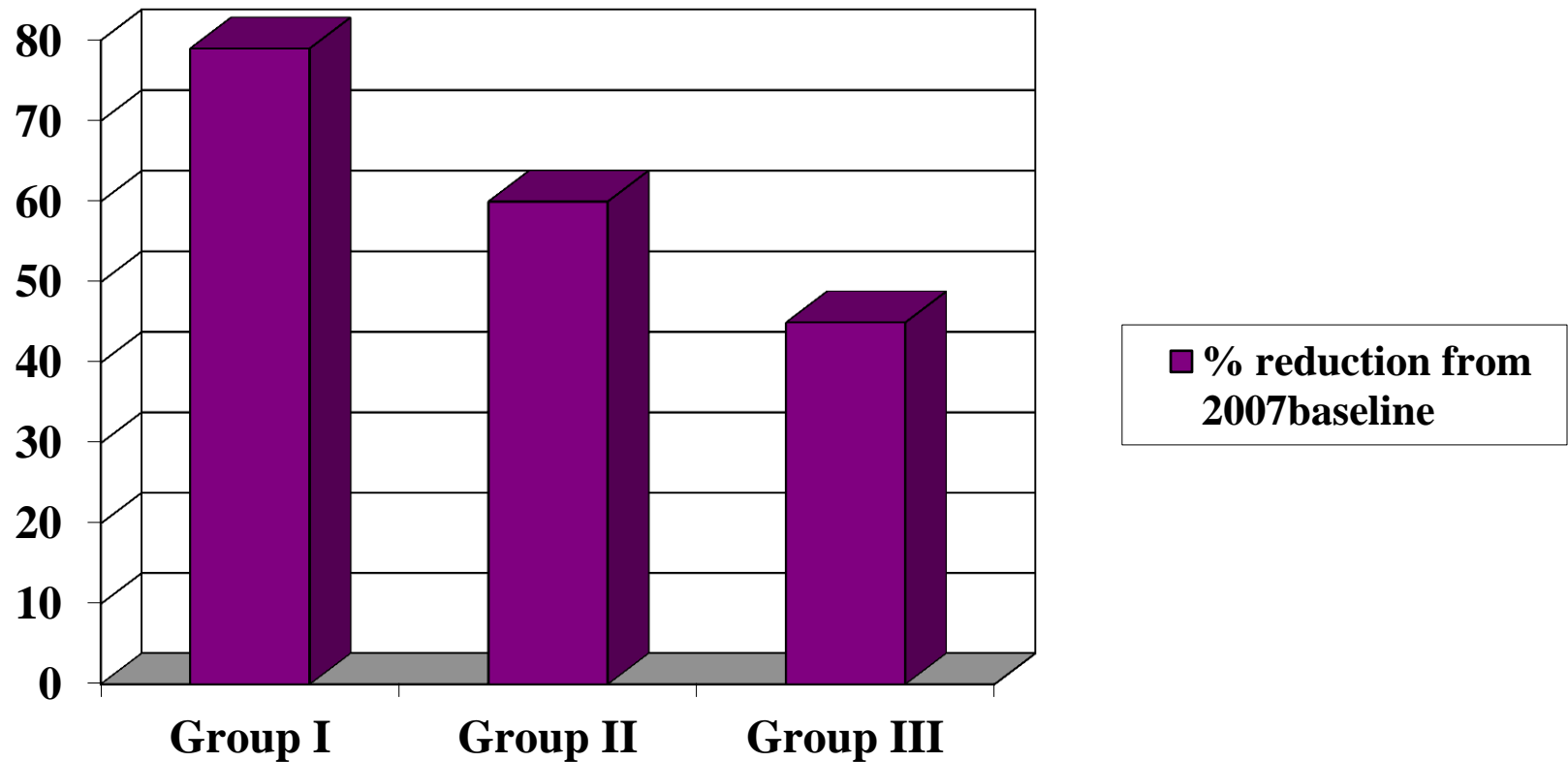
Variable	2007	2009	P value
Deliveries, n	17,194	17,221	NA
Deliveries > or = 37 wk, n	14,995	14,863	NA
Planned + Elective Deliveries at 37.0–38.6 wk, n	6,562	4349	<.001
Elective Deliveries at 37/0–38.6 wk, n (%)	1712 (9%)	746 (4.3)	<.001
Group 1:7 hospitals, n/N(%)	320/3886 (8.2)	5/3818 (1.7)	.007*
Group 2:9 hospitals, n/N(%)	403/4797 (8.4)	155/4646(3.3)	<.025
Group3:11 hospitals, n/N(%)	989.9111 (10.9)	526/8757(6.0)	.135*
Neonatal Intensive Care Unit admissions at > or=37 wk, n (%)	1328 (8.9)	1119 (7.5)	<.001

*indicates 2-way analysis of variance, other P values were obtained with X2 Yates correlation correction


TERM DELIVERIES 2007 VS 2009 Facilities




% Reduction in elective birth < 39 weeks, according to policy approach



2009 STUDY RESULTS AND CONCLUSIONS

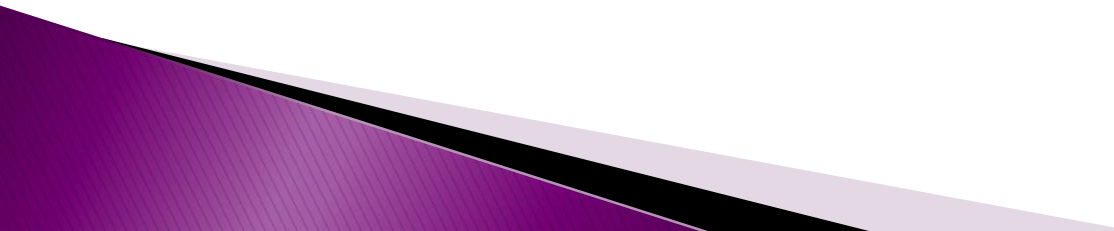
- Elective early term delivery was reduced from 9.6–4.3% of deliveries.
 - The rate of term neonatal intensive care admissions fell by 16%.
 - We observed no increase in stillbirth.
 - The greatest improvement was seen when elective deliveries at <39 weeks were not allowed by hospital personnel.
 - Physician education and the adoption of policies backed only by peer review are less effective than “hard stop” hospital policies to prevent elective deliveries prior to 39 weeks gestation.
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2009 STUDY RESULTS AND CONCLUSIONS


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- 

*WOMEN'S & CHILDREN'S HOSPITAL
JOURNEY*


WOMEN'S & CHILDREN'S HOSPITAL JOURNEY

- ▶ In 2007, Participated in the 1st study
 - ▶ In Fall of 2008, adopted a soft approach
 - Physician & Staff education conducted
 - ▶ In Early 2009, received the HCA Tool Box
 - ▶ Embarked on our journey towards reducing elective deliveries less than 39 completed weeks
 - ▶ In May 2009, participated in the 2nd study
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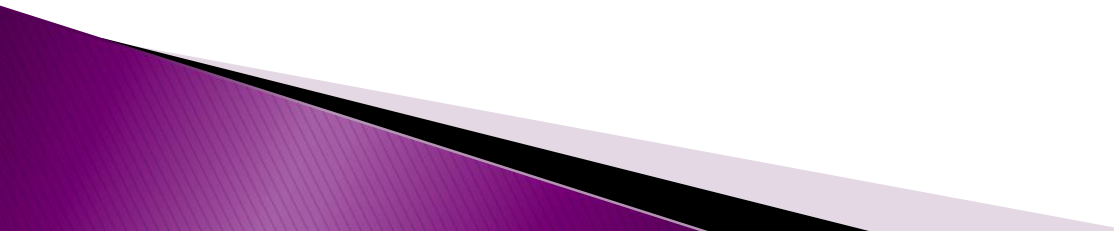
WOMEN'S & CHILDREN'S HOSPITAL JOURNEY

- ▶ July 2009, Physicians agree to adopt policy
 - Policy adopted however no penalties for scheduling
 - ▶ In 2010 & 2011, policy revised to include consequences for policy violation
 - ▶ In February 2011, WCH approached to join state-wide collaborative
 - ▶ March 2011, enrolled in IHI Project
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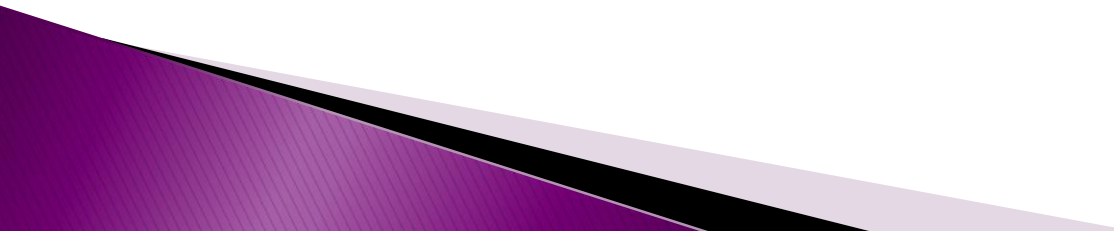
The Team

- ▶ Colette LaCombe, RNC – Team Leader
 - ▶ Dr. Frank Caillet, Chief of OB Services
 - ▶ Dr. Sheryl Rodts–Palenik, MFM
 - ▶ Sharon Gates, RN, ACNO
 - ▶ John Marker, CNO
 - ▶ Bill Ferry, Director, Risk Management
 - ▶ Ginger Broussard, Director, Quality
 - ▶ Anitra Ford–Scott, RN, L & D Manager
 - ▶ Paige Landry, RN, Staff
 - ▶ Melanie Romero, RNC, Staff
- 

IHI PROJECT MEASURE SETS

- ▶ Elective Delivery Rate prior to 39 weeks
 - ▶ Cesarean Rate for low risk first birth women
 - ▶ Perinatal Harm
 - ▶ Gestational Age Reliability
 - ▶ Transfer to Higher Level – Neonate
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IHI Project

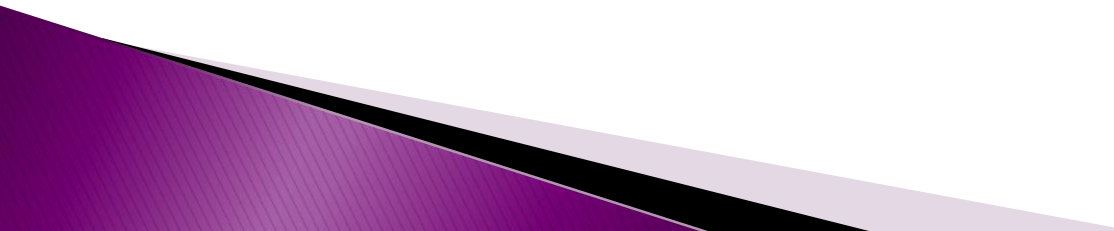
- ▶ First Steps
 - Team
 - What are we suppose to be doing?
 - ▶ Data collection
 - ▶ Challenges
 - Physicians
 - Patients
 - Scheduling
 - ▶ Next Steps
- 

PATIENTS DELIVERED BETWEEN \geq 37 WEEKS AND $<$ 39 WEEKS DATA REPORTED

Percentage of patients who electively delivered newborns with \geq 37 and $<$ 39 weeks of gestation completed (TJC PC.01)

Lafayette Women's and Children's Hospital – Louisiana				
Time Period	Percent Value	Patients with Elective Deliveries	Patients delivering \geq 37 and $<$ 39 weeks gestation	Annotation Type
5 – 2011	20.19	21	104	None
6 – 2011	13.89	10	72	None

Next Steps

- ▶ Revise the policy with a “Hard Stop”
 - ▶ Revised scheduling procedure for inductions / C-Sections
 - ▶ Revise forms
- 

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- ▶ Alan TN, Landon Mark, Spong CY et al: Timing of Elective Repeat Cesarean Delivery at Term and Neonatal Outcomes. New England Journal of Medicine, January 2009
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- ▶ American College of Obstetricians and Gynecologists. Late Preterm Infants. Washington, DC: The College: 2008. Committee Opinion no. 404.
- ▶ Clark SL, Belfort MA, Miller DK et al: Neonatal and Maternal Outcomes associated with elective term delivery. American Journal of Obstetrics and Gynecology , January 2009
- ▶ Clark S, Frye D, Meyers J, Belfort M, Dildy G, Kofford S, Englebright J, Perlin J. Reduction in elective delivery at elective 39 weeks of gestation: comparative effectiveness of 3 approaches to change and the impact on neonatal intensive care admission and stillbirth. American Journal of Obstetrics and Gynecology 2010: 1.e1–6.

QUESTIONS?

THANK YOU!